ANALYSIS OF WOMEN PARTICIPATION IN PROCESSING AND MARKETING OF *GURASA* IN, KANO STATE NIGERIA

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ABSTRACT

The study analyse the Women Participation In Processing And Marketing Of Gurasa in Kano metropolis. It examined marketing channels, and problems during marketing of gurasa. Multistage sampling technique was used to select 128 Gurasa processors and 112 Gurasa marketers. Primary data were collected using a questionnaire. The analytical tools used include descriptive statistics, Net Processing Income and Net Marketing Margin The mean age of the processors in the study area was 43 years while the mean years experience is 17 Gurasa is processed manually using traditional tools. Processed Gurasa were marketed from their various homes or taken to YanGurasa market, few of the women processors (17.86%) sell their gurasa at YanGurasa market while 53.57% sell from home, other sell in neighbouring states like Jigawa, Katsina and outside the country. Processing of Gurasa is very profitable considering a Net Processing Income of ₦9,963.22 and ₦2.13 was derived from every naira invested. Despite the profitability of enterprise, certain constraints were faced by the marketers include insufficient fund to expand the business and lack of government recognition. The study therefore recommends the need for NGO's to recognise the contributions of Gurasa processing and marketing to the economy and include it as part of the programs targeted at women empowerment.

KEYWORDS: Gurasa, Profitability, Processing & Marketing

Original Article

INTRODUCTION

There are three general types of bread, leavened, flat and steamed bread. Although all three types are prepared from a refined or wholemeal flour and water to form the dough, each bread type differs from one another on specific end product properties, processing conditions, and grain quality. Bread is a staple food in developing countries. In Nigeria, it is consumed in relatively large quantities by different classes of people irrespective of their social status because it is affordable and available in a "ready to eat" form (Darko, 2002).

According to (Nafisat, et, al., 2015), *Gurasa* is locally made bread. It is leavened bread but flat in shape, normally produced in Northern Nigeria and is also known to be popular bread among the Arabians. Leavened bread are made with aerated yeasted viscosity dough, which expands by the action of gas produced by the yeast fermentation process to gain volume and decrease its density. *Gurasa* top crust has many small blisters and it is usually sprinkled with sesame seed to differentiate between sugar and salt taste. *Gurasa* is produced in large quantities in Kano state both for local consumption, commercial and export to other countries. It was formally adjudged the rich man's specialty and known to be found on the dining tables of the royals and the elites in the society in the early 80s. It is made from plain flour and baked in locally made oval shaped earthenware pots known

as *Tanderu*, after it has been heated from within with cornstalk or firewood (Nafisat et. al., 2015).

NSPRI (2000) reported that processing activities in Kano state and indeed Nigeria operate on a small scale, even though it provides gainful employment not only to skilled but mostly unskilled labor. The industry is facing hardship because of the use of old and traditional culture of processing. These methods are often laborious, time-consuming and inefficient. Also in many African Nations, entrepreneurial activities of women are often hampered by traditional and cultural constraints. Poor methods of processing of agricultural products and by products are some of the major factors that cause a major loss in the world with special emphasis on developing countries like Nigeria, (FAO, 1995). The demand for *Gurasa* has continued to increase as the taste and palatability has been gradually adopted as food for both the rich and poor, but yet the processing still remains on a small scale with little or no value added in processing and marketing of the product.

The economics of women participating in the processing and marketing of *Gurasa* is necessary because it will bring to focus factors that influence level of profitability and the constraints militating against the processing and marketing will also be identified. Ultimately, due to backward and forward linkages, *Gurasa* processing and marketing create job opportunities and absorbs labor and helps alleviating unemployment problems.

The research aims at analyzing Gurasa processing and marketing in Kano state and the specific objective is women participation in Gurasa processing and marketing and the constraint associated with Gurasa processing.

METHODOLOGY

The study was conducted in Kano state which lies in the Northern part of Nigeria between latitudes 9o 30' and 10o 33' to 12o37' North and longitudes 7o 34' to 9o 25' East. The annual rainfall varies from 600-1200mm in the Guinea Savannah to 300-600mm in the Sudan Savannah which starts from May and ends around September. The length of the growing period ranges from 90 to 180 days, (KNSG, 1997). Kano State occupies a total land area of about 2040km2. Kano state has 44 local government areas and the population is estimated at about 9,383,682 in the 2006 census and over 10% of the total population resides in the study area (NPC, 2014). Increase in population is put at 7% per annum (KNSG, 2014).

Jakara in Kano municipal is close to Dala local Government located in North-west part of Kano metropolis. It covers an area of 185 km^2 with a population density of 418,777 of people at the 2006 national census. It is known as the first city settlement in Kano. The arrival of Katsina and Wadai Arabs in Kano, who were attracted by the iron ore they discovered in Dala Mountains, swelled the number of the North African traders already resident in Kano. Like every newly emergent community in a strange land, the new settlers felt the need for a place where they could obtain their own sort of food so an "Inn" called *Al-findiki* (from the Arabic *al-Funduq* "an inn) was built and there wheat-based foods such as *al-kaki*, *al-kubus, al-garagis*, and *al-Gurasa* were taught to the female indigenous . Thus, from Kano *al-Kama* or wheat foods spread to the rest of Hausa land. (kanoonline.com, 2011). The initial settlement became the currently known Jakara, Yan*Gurasa* which is the study area. Jakara quarters in Kano municipal of Kano State shares boundaries with Alkawa in the East, Mararraba in the South and Sanka in the North and Magoga in the West.

Multi-stage sampling technique was used for the study. Stage one involved purposive selection of Kano municipal and Jakara quarters, because of the high concentration of *Gurasa* processing and marketing in the area. Stage two also involved purposive selection of all the wards (sub quarters) in Jakara quarters which have sub quarters namely; *Aikawa, Dukawuya, Tudun-makera, Dandalin-turawa, ChediyarYanGurasa, Muskwani, Rijiya-hudu* and *Kabawa* making a total of

eight (8) eight sub quarters in Jakara Quarters.30% of the sample frame was selected using proportionate sampling from each of the eight sub quarters of Jakara quarters making a total of 128 processors based on the preliminary survey indicated in Table 1. The last stage involved the random selection of the processors from the Households and Chedyar Yan *Gurasa* market, Table 2 shows estimated sellers of *Gurasa,* the sellers were classified based on the number of 24kg bags, every marketer with above one bag/24kg of *Gurasa* is listed as wholesalers, while those with one bag/24kg or less are listed as retailers. The sample frame was estimated using the proportionate sampling method in which 30% were selected out of the population.

The study ,therefore, sampled 128 *Gurasa* processors and 112 *Gurasa* marketers which gave a total sampling size of 240 respondents.

Primary data were used for the study. The primary data were obtained from the processors and marketers using a structured. A Questionnaire was designed to collect information on a range of themes including the socio- economic characteristics of the processors and marketers such as. age, education, gender roles, processor and marketer's experiences, processing channels, market structure and the costs and returns from *Gurasa* processing and marketing.

DATA ANALYSIS

The data were analyzed using descriptive statistics such as flow charts, mean, frequency distribution and percentages, the profitability of *Gurasa* processing and marketing analyzed using Net Processing Income and Net Marketing Margin

Net Processing Income (NPI): This is the Gross revenue less the total cost of processing following Inuwa (2011), which was used in determining the profitability of *Gurasa* processing.

The model can be expressed mathematically as:

$$NPI = GR - TC \qquad (1)$$

NPI = Net Processing Income (Naira)

GR = Gross revenue or Gross receipts (Naira) which is the total output multiply by the price per unit product (*Gurasa*)

TC = Total Cost (naira)

TFC = Total fixed cost (naira) which includes depreciation value of fixed inputs used in processing *Gurasa*. This cost includes depreciation on inputs such as a local oven (*Tanderu*), containers, brooms, tray pan.

Net Marketing Margin

The model can be expressed mathematically as:

$$NMM = TR - TMC \qquad (2)$$

Where

NMM = Net Marketing Margin

This is the revenue derived from the sale of *Gurasa*

TR =Total Revenue which is the sum of outputs multiplied by their unit price

TMC = Total Marketing Cost

Marketing Efficiency

The model is specified as**:**

$$M.E. = \frac{\text{Value added by marketing}}{\text{Cost of marketing}} \times 100 \tag{3}$$

Where

M.E = Marketing efficiency

Cost of marketing = Total Marketing Cost = All the costs involved in marketing *Gurasa*

Value added by marketing= Retail price at consumer level less producers price

Cost of marketing service=service cost of performing various marketing.

Return on Naira investment

This was employed as return per naira invested and measured the net return accruing to the marketers for each N1 expended in the business. The model is expressed as;

$$R/Ng = Ng/TCg \tag{4}$$

Where;

R/Ng= Average net return per Naira invested in *Gurasa* processing/marketing.

NIg= average net income or net revenue from sales of *Gurasa*.

TCg= average total cost for processing/marketing of *Gurasa*.

The decision rule is that if;

R/N > 0 implies positive returns to the business.

R/N < 0 implies negative returns to the business

RESULTS AND DISCUSSIONS

Processors: Processors are individuals, mainly females who are involved in the actual processing of *Gurasa*. The processors usually sell to the urban wholesalers, rural wholesalers, retailers, and consumers either at household level where the processing takes place or at Yan*Gurasa* market. The major ingredients are dry yeast, salt/sugar (optional), wheat flour, and water. The crust color is milk brown. *Gurasa* is made by mixing premeasured amounts of flour, salt water, and yeast; the ingredients are gently mixed to form dough formed into balls and baked in a preheated local oven (*Tanderu*).
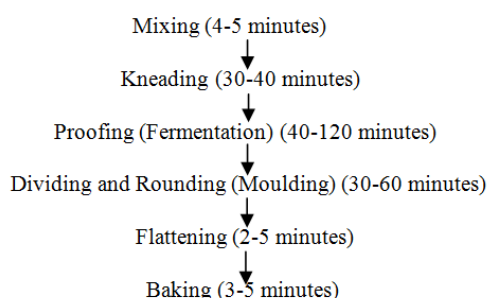
Mixing (4-5 minutes)

↓

Kneading (30-40 minutes)

↓

Proofing (Fermentation) (40-120 minutes)

↓

Dividing and Rounding (Moulding) (30-60 minutes)

↓

Flattening (2-5 minutes)

↓

Baking (3-5 minutes)

Figure 1: Flow Chat for Processing *Gurasa*

Socio-Economic Characteristics of Women Processors

The socio -economic characteristics of the processors as presented in Table 1, revealed that many of the processors (47.66 %) were aged between 53-62 age range, followed by 25% who belong to 23-32 years age group The mean age of the processors in the study area was 43 years, this shows that most processors were at their active years, with the majority (65.62%) having an informal Quranic education. *Gurasa* processing is a family business where most of the respondents learned the business from their parents and relations, the majority of the processors were married with long years of experience, the mean year's experience is 17 years. A large proportion of the households (88.8%) had at most five members; the average household size is 6 people. *Gurasa* is processed manually using traditional tools, which had always been used over the decades, this method of processing is time-consuming and very tedious. Processed *Gurasa* were marketed from their various homes or taken to Yan*Gurasa* market, few of the women processors (17.86%) sell their *gurasa* at Yan*Gurasa* market while 53.57% sell from home, other sells in neighboring states like Jigawa, Katsina and outside the country as shown in Table 2.

Profitability of *Gurasa* Processing

Results in Table (3) shows the Variable Cost, Fixed Cost, Total revenue and Net Processing Income associated with *Gurasa* processing. *Gurasa* is differentiated by three major sizes, small, medium and largely sold at ₦10, ₦15 and ₦25 respectively. The medium size is mostly preferred by the marketer. The cost and return are therefore based on the medium-sized *Gurasa* sold at ₦15 from the processors to the wholesalers and ₦20 sold to the retailers from the processors.The results as shown in Table 3 revealed that cost of flour constituted the major cost of processing *Gurasa* (79.63%) valued at ₦5,340. Cost of cornstalk used as fuel-wood in the baking of *Gurasa*, constitute 8.81% of the total variable cost which is valued at ₦643; for every bag processed. The Total Variable Cost of processing *Gurasa* is **₦7,306.05** which represents 83.14% of the Total Cost of processing. Processing of *Gurasa* is very profitable considering a Net Processing Income of ₦9,963.22 and ₦2.13 was derived from every naira invested.

Major Problems of *Gurasa* Processing

The major constraint faced by women processors (74.1%) had inadequate fund, therefore, needs government to support the enterprise followed by 65.18% of low sales during the rainy season because most of the retailers who buy *Gurasa* from them in order to hawk in different parts of the state travel to their various villages during the rainy season. This drastically affects the business in terms of low sales. The tedious nature of *Gurasa* processing is another constrain as indicated by 56.82% of the processors, mixing and kneading of the flour is very tedious, which makes the processors to hire labor for the task which increases the processing cost.

The introduction of cassava in flour 52.68% has reduced the quality as it makes the dough not to stick on the walls of the local oven (*Tanderu*) rather it slides down into the fire causing great loss. The absence of cooperative association is also another challenge for the processors.

CONCLUSIONS

Results from the socio-economic characteristics of the processors in the study area revealed that many of the processors (47.66 %) were aged between 53-62 age range, followed by 25% who belong to 23-32 years age group The mean age of the processors in the study area was 43 years, this shows that most processors were at their active years, all were females with the majority (65.62%) having an informal Quranic education. *Gurasa* processing is a family business where most of the respondents learnt the business from their parents and relations, the majority of the processors were married with long year's of experience, the mean years experience is 17 years. A large proportion of the households (88.8%) had at most five members; the average household size is 6 people. *Gurasa* is processed manually using traditional tools, which had always been used over the decades, this method of processing is time-consuming and very tedious.

The net income analysis revealed that *Gurasa* processing is a profitable enterprise with processor recording revenue of ₦18,750 and a net income of ₦9,963.22. The major problems faced by these respondents are insufficient fund to expand the business due to the fact that most of the funds realised are being utilized immediately into family matters and lack of government recognition, other problems include credit purchase, and some of the retailers may not return the money and also the tedious nature of the processing. Other constraints include bad flour quality, wheat flour made in Kano seems to have more cassava and does not come out well when processing, burning of hands as health hazards, lack of storage facilities, rainy season problems such as lack of dry cornstalk, and lack of proper roofing of their open kitchen.

RECOMMENDATIONS

Based on the research findings from the study area, the following recommendations are suggested:

There is need for women processors to explore the market outlets to be able to combat the problems of low sales during the wet season, and also they should liaise with local simple machine fabricators such that simple and affordable mixing machine can be developed which will reduce the tedious nature of mixing and kneading, Formation of strong and viable cooperative groups will go a long way in helping the women processors and lastly there is also need for government and NGO's to recognise the contributions of *Gurasa* processing and marketing to the economy and therefore include it as part of the programs targeted at reducing poverty and provision of employment.

REFERENCES

1. *Akande, S.O., and G. Akpokedje, (2003). "Rice Price and Market Integration in Selected Areas in Nigeria: A Study report," In The Nigerian Rice Economy in a Competitive World: Constraints, Opportunities and Strategic Choices, Nigeria Institute of Social and Economic Research (NISER), Ibadan. Htpp://usaid.gov/pdf-docs/PNADB07,pdf.*

2. *Darko K.O. (2002). The Role of Street Food Vendors in the Transmission of Enteric - 547. Pathogens. Ghana Medical Journal Bulletin of the World Health Organization. 80(7): pp.546*

3. *FAO, (1995).Wheat for Bread and other Foods. Relationships between IB-encoded Gluten in Subunit Composition and Bread Making Characteristics of some Durum Wheat (triticumturgidum) Cultivars. J, cereal Sci., 19:243-249.*

4. KNSG (1997).**Participatory Rural Appraisal on Household Food Security and Nutrition Summary Report Kano State Nigeria**. November, 1997. 5ppKNSG, 1914

5. Nafisat, N., Mustapha, A., & Abdu, Z. (2015). Profitability of Gurasa Marketing In Kano Metropolis, Kano State, Nigeria. In Conference Proceedings of the 16th Annual Conference of the Nigerian Association of Agricultural Economists, Wudil (pp. 385–388). Kano: NAAE.

6. National Population Commission, N.P.C,(2006). Population Figures, Kano N.P.C

7. Mohan, Chavan, et al. "Nitrate reductase study from heat susceptible and heat tolerant cultivar of wheat (Triticum aestivum L.)." International Journal of Agricultural Science and Research (IJASR) 4.4 (2014): 59-76.

8. kanoonline.com, 2011

9. Olukosi, J.O. and Erhabor, P.O. (2008). **Introduction to Farm Management Economics**: Principles and Application. Agitab Publisher Limited, Zaria pp 66-67.

10. Peña, R.J., Zarco-Hemandez, J., Amaya-Celis, A. &Mujeeb-Kazi, A. (2000). Relationships between IB- encoded gluten in subunit compositions and bread making quality characteristics of some durum wheat (Triticumturgidum) cultivars. J. Cereal Sci., 19: 243-249.

11. USDA.(1998). Wheat production up sharply, global stocks building in 1997/1998. In Wheat Year Book, Economic Research Service/USDA, p 14-15, March 1998.

Table 1: Socio-Economic Characteristics of Women Processors

Variable	Frequency	Percentage	Minimum	Maximum	Mean	Standard Deviation
Age			**23.00**	**68.00**	**44**	**15.25**
23-32	32	25.00				
33-42	9	7.03				
43-52	12	9.38				
53-62	61	47.66				
63-72	14	10.93				
Household Size			**1.00**	**12.00**	**7**	**3.993**
1-3	29	22.66				
4-6	59	46.09				
7-9	3	2.34				
10-12	37	28.91				
Years of Experience in *Gurasa* Processing			**3.00**	**40.00**	**18**	**13.232**
3-10	60	46.88				
11-18	26	20.30				
19-26	12	9.38				
27-34	17	13.28				
35-42	13	10.16				

Table 1b: Qualitative Socio Economic Characteristics of *Gurasa* Processors

Variable	Frequency	Percentage
Marital Status		
Married	60	46.88
Single	3	2.34
Divorced	23	17.97
Widowed	42	32.81

Table 1(b): Contd.,		
Household status		
Household head	72	56.25
Member	56	43.75
Educational level		
Quranic	84	65.62
Primary	9	7.03
Secondary	29	22.66
Tertiary	6	4.69
Membership cooperative group		
Member	29	22.66
None	99	77.34

Source: field Survey, 2016.

Table 2: Marketing Outlets for *Gurasa*

Selling points	Frequency	Percentage
Yan*Gurasa* Jakara	20	17.86
At Home	60	53.57
Jigawa State	12	10.71
Katsina State	16	14.29
Export to other countries	6	5.36

Source: Field Survey, 2016.

Table 3: Average Cost and Return for Processing *Gurasa* from 50kg Bag of Flour

Parameter	Quantity	Value (₦)	% of TVC	%TC
Output of *Gurasa*/bag	1250pieces	15.00		
Total Revenue (TR)		18,750.00		
Variable Cost (VC)				
Flour	50kg	5,340.00	73.09	60.77
Salt	20g	26.36	0.36	0.30
Sugar	500g	100.00	1.36	1.34
Cornstalk	7 bundles (3kg each)	643.75	8.81	8.21
Water	56 litres	54.28	0.74	0.62
Beniseed	20g	50.00	0.68	0.57
Yeast	500g	380.75	5.21	4.33
Matches	4 pkt	90.91	1.24	1.03
potash	200g	20.00	0.27	0.22
Labour		600.00	8.21	6.83
Total variable Cost (TVC)		7,306.05	100	83.14
Fixed Cost (FC) with Depreciation				
Local oven (*Tanderu*)		380.73		4.33
Bowl		400.00		4.55
Scrapper		50.00		0.57
Broom		100.00		1.34
Tray pan		350.00		4.00
Matsami (metal spoon)		200.00		2.68
Total Fixed Cost (TFC)		1480.73		16.85
Total Cost (TC)		8786.78		100
Net Processing Income (NPI)		9,963.22		
Benefit Cost Ratio		2.13		

Source: Field Survey, 2016.